

Alternatives Evaluated

For the analysis of potential improvements for I-93 between Salem and Manchester, an evaluation of transportation modes other than personal passenger vehicles in general-purpose highway travel lanes was conducted. These alternative modes included rail services, bus services, and HOV lanes.

The mode options analyzed were chosen based on technology, financing, and infrastructure that are available today and are practicable. The intent was to test the ridership potential of alternative modes under favorable, but realistic conditions. The parameters used to define the options did not necessarily limit the capacity of the various options. For example, sufficient parking was assumed at each bus or rail station to accommodate all potential demand at the station. Similarly, a sufficient number of busses or cars per train were assumed to be available to satisfy projected demand.

Based on the analysis of a number of multimodal and highway improvement alternatives, the following seven alternatives or combinations thereof were selected as a "reasonable range of alternatives" for more detailed evaluation in this EIS:

1. The No-Build Alternative, which essentially serves as the baseline condition for comparison with the Build Alternatives.
2. Transportation Systems Management (TSM) measures, specifically minor improvements such as ramp lengthening and lane widening that can be accomplished within the existing ROW at minimal expense. Such measures generally do not address the long-term project purpose and need, but will help to alleviate problems in the near term. Two other TSM measures, ramp metering and shoulder lane use, were determined to be impractical and were not proposed for further consideration.
3. Widening I-93 to four lanes in each direction for the entire length of the corridor including interchange improvements, in addition to constructing or expanding park-and-ride lots at Exits 2, 3, 4, and 5, and providing room and, as practical, constructing sub-grade for future rail transit service within the highway corridor. *This is the Selected Alternative.*

4. Widening I-93 to three lanes in each direction for the entire length of the corridor including interchange improvements, in addition to the same park-and-ride lot construction and provision for future rail transit service as noted with the four-lane widening alternative.
5. Widening I-93 to four lanes in each direction south of Exit 3 and three lanes in each direction north of Exit 3 including interchange improvements, along with the provisions proposed with either the three or four-lane widening schemes. This is the so called "Combination Alternative".
6. Transportation Demand Management (TDM) measures, specifically Intelligent Transportation Systems (ITS) techniques as well as employer-based measures utilizing incentives and disincentives to encourage people to not drive alone. It was concluded that congestion pricing, another TDM measure, would be impracticable.
7. Improvements in bus service to include expanding existing service and providing an enhanced service to employment centers in northern Massachusetts. After ridership studies, it was concluded that neither rail service nor HOV lanes would be effective alone or in combination with other mode options in satisfying the need for the project.

Based on an evaluation of the Reasonable Range of Alternatives for the project and with input from the state and federal agencies and corridor communities, and with more than 50 meetings having been held, NHDOT and FHWA identified alternative number 3 listed above as the Selected Alternative. For more detailed explanation of the considered alternatives, please see the FEIS documents.